

Lesson 1: Course Introduction and Position Overview

Course Overview

The Geospatial Information System (GIS) Specialist is a key GIS Unit position within the Planning Section. This course helps trainees prepare to perform the responsibilities of the GIS Specialist in a FEMA environment in response to an incident.

By the end of this course, you will be able to:

- Recognize how a GIS Specialist supports a response and recovery operation.
- Identify sources of information and data within FEMA and the emergency management community
- List the types of products commonly produced by the GIS Unit during an incident
- Identify best practices for establishing and maintaining data flow, creating products, and meeting timelines during an incident
- Identify how to appropriately handle and protect licensed, sensitive, or personal data
- Recognize how to use remote sensing products

This course will take approximately 2 hours to complete.

Lesson Overview

You can now navigate through this course. The rest of this lesson will focus on the FEMA Position Task Book (PTB) and the defined behaviors for the GIS Specialist position.

This lesson should take approximately 10 minutes to complete.

Learning Objectives

By the end of this lesson, you will be able to:

- Recognize the FEMA Qualification System (FQS) process.
- Recognize the role of the FEMA PTB in the FQS process.
- Identify the behaviors and tasks defined in the FEMA PTB for the GIS Specialist position.

FEMA PTB for GIS Specialist

This lesson aligns with the following PTB Behavior/Activity:

- Ensure readiness for assignment prior to deployment.

FEMA Qualification System (FQS)

The FQS establishes the system for qualification and certification of the FEMA workforce through experience, training, and demonstrated performance. The system was developed to:

- Ensure a qualified workforce based on performance standards,
- Establish minimum, consistent, and fair qualification requirements for all workforce positions regardless of employment status, and
- Strengthen the training and qualification standards for all workforce positions by implementing improvements based on analysis.

The steps of the FQS process are:

Step 1: The process starts when a Certifying Official issues a Position Task Book (PTB) to an individual with required FQS experience.

Step 2: After the individual completes required training and demonstrates the ability to perform all required tasks, he/she is deployable as a Trainee.

Step 3: The certification process includes review and approval. Individuals who qualify are designated as “Qualified” by the certifying authority.

Trainee/Meets Required FQS Experience/PTB Issued Area:

A performance-based qualification system is appropriate for FEMA. The FQS builds upon previous agency credentialing efforts, such as using previous task books, as the foundation to develop more robust capabilities within incident management and incident support PTBs.

As a first step, individuals with the required experience are issued a PTB after the certifying official validates a candidate’s experience against FWS requirements. With the issuance of the PTB, the individual becomes a “Trainee” and is eligible for deployment in that position, as a trainee.

Required Training/Demonstrated Performance Area/PTB and Training Complete Area:

Trainees engage in a cycle of completing required training (per the FEMA Qualification Sheet) and demonstrating performance of tasks outlined in the PTB at incidents. This is an iterative process, and will likely involve more than one deployment as a trainee to demonstrate performance of all position tasks. When the trainee has demonstrated performance of all position tasks and the PTB is completed, then the individual may begin the certification process.

Certification Process Review and Approval Area:

Certification is the process by which the certifying official formally validates, approves, and documents the fact that an individual is qualified for a specific FQS position. The certifying official considers a number of factors including the variety of incidents (e.g., floods, tornados, hurricanes. etc.); their size and complexity; and the number of assignments for each individual.

“Qualified”/Qualification Issued Area:

When the certifying official approves an individual for certification, the trainee is determined to be qualified for the target position and receives a qualification letter indicating that his/her status has been changed from “trainee” to “qualified.”

FEMA PTB for GIS Specialist

The GIS Specialist PTB contains all the critical behaviors, activities, and tasks required to become certified as a GIS Specialist. When a trainee successfully demonstrates task performance for an FQS evaluator at an incident, the Evaluator signs off on those tasks in the trainees’ PTB. The PTB serves as the official record of successfully completed tasks.

This course does not address all of the behaviors and tasks in the PTB because many of the more generic behaviors, such as following established safety and security procedures, are addressed in other required FEMA training.

Additional Training That Supports the Development of GIS Knowledge and Skills

Additional training designed to develop GIS knowledge and skills includes:

- Introduction to GIS courses (provided by many external sources)
- EMI (E190) ArcGIS for Emergency Managers
- ESRI – Learning ArcGIS Desktop
- ESRI – HAZUS-MH online courses
- ESRI – Learning ArcGIS Spatial Analyst
- ESRI – Creating, Editing and Managing Geodatabases for ArcGIS Desktop
- ESRI – Understanding GIS Queries
- ESRI – Using Python in ArcGIS Desktop – Introduction to Python and Integration with ArcGIS Desktop
- ESRI – Basics of the Geodatabase Data Model

Lesson Summary

This lesson presented the following topics:

- The FQS Process
- The Role of the PTB in the FQS
- FEMA's GIS Specialist PTB

The next lesson presents information about the resources you will use and the processes you will follow as a GISP at an incident, and describes how the GIS Unit interacts with and supports the incident response and recovery operation.